

# Product Data Sheet

## FITC anti-human CD3

**Catalog # / Size:** 300405 / 25 tests  
300406 / 100 tests

**Clone:** UCHT1

**Isotype:** Mouse IgG1,  $\kappa$

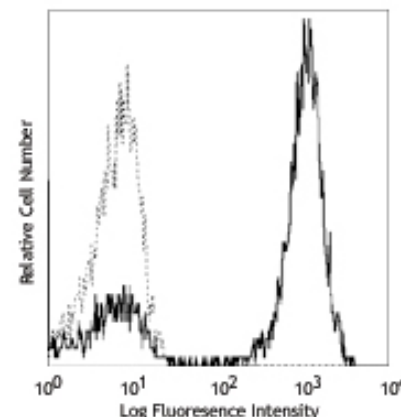
**Workshop Number:** III 471

**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with UCHT1 FITC

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections<sup>4,6,7</sup> and formalin-fixed paraffin-embedded sections<sup>11</sup>, immunoprecipitation<sup>1</sup>, activation of T cells<sup>2,3,5</sup>, and Western blotting<sup>9</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 300414). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 300438) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/ $\mu$ g).

**Application References:**

- Salmeron A, *et al.* 1991. *J. Immunol.* 147:3047. (IP)
- Graves J, *et al.* 1991. *J. Immunol.* 146:2102. (Activ)
- Lafont V, *et al.* 2000. *J. Biol. Chem.* 275:19282. (Activ)
- Ryschich E, *et al.* 2003. *Tissue Antigens* 62:48. (IHC)
- Thompson AG, *et al.* 2004. *J. Immunol.* 173:1671. (Activ)
- Sakkas LI, *et al.* 1998. *Clin. Diagn. Lab. Immun.* 5:430. (IHC)
- Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
- Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed
- Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Pollard, K. *et al.* 1987. *J. Histochem. Cytochem.* 35:1329. (IHC)

**Description:** CD3 $\epsilon$  is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is composed of two CD3 $\epsilon$ , one CD3 $\gamma$ , one CD3 $\delta$ , one CD3 $\zeta$  (CD247), and a T-cell receptor ( $\alpha/\beta$  or  $\gamma/\delta$ ) heterodimer. It is found on all mature T lymphocytes, NK-T cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T cell activation.

**Antigen References:**

- Barclay N, *et al.* 1993. *The Leucocyte FactsBook*. Academic Press. San Diego.
- Beverly P, *et al.* 1981. *Eur. J. Immunol.* 11:329.
- Lanier L, *et al.* 1986. *J. Immunol.* 137:2501-2507.

### Related Products:

Product  
 FITC anti-human CD19  
 FITC anti-human CD3  
 FITC anti-human CD8a  
 FITC anti-human CD4  
 FITC anti-human CD8a  
 FITC Mouse IgG1,  $\kappa$  Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)  
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

Clone  
 HIB19  
 HIT3a  
 HIT8a  
 RPA-T4  
 RPA-T8  
 MOPC-21

Application  
 FC  
 FC  
 FC  
 FC  
 FC  
 FC, ICFC  
 FC, ICC, ICFC  
 FC, ICFC  
 FC, ICC, ICFC



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